



U-matic Videocassette Recorder
VO-7600
(NTSC)



SONY®

The VO-7600 U-matic Videocassette Recorder—The Next Generation

Sony presents the VO-7600 U-matic Videocassette Recorder to enrich U-matic video communication systems. This product incorporates the latest technology to make video communication even more efficient by creating new application possibilities. In addition to the outstanding features of conventional U-matic recorders, such as high quality picture, simple remote control, picture search, and programmed operation, the VO-7600 features a new address code, Frame Code, which allows accurate random access and external computer control with the addition of an optional board. These functions broaden video applications by adding new possibilities for programmed operation, interactive training systems, and point-of purchase and point-of-information displays. The VO-7600 is sure to be an indispensable tool for video communication systems.



U-MATIC PICTURE QUALITY

The VO-7600 obtains high picture quality by making the most of the U-matic format. The adoption of new Y (luminance signal)/C (chrominance signal) separation circuits reduces luminance signal leakage into chrominance signals and a new smear compensation circuit has also been incorporated in the VO-7600. As a result, the VO-7600 offers a clear and vivid picture.

SYSTEM VERSATILITY

Frame Code And RS-232C Interface Capability

With the optional FCG-700 Frame Code Generator, Frame Code, which is an absolute address code, can be generated frame by frame and recorded in the vertical blanking intervals of the video signal. The Frame Code is a 6 digit number from 000000 to 299999 and it appears on the LED display when the CTL/FRAME CODE switch is set to FRAME CODE and the optional BKU-701 Computer Interface Board, which provides an RS-232C interface, is inserted. Since accurate access is obtained with the Frame Code, random access and sophisticated programmed operation are possible with an external computer or the optional RX-707 Auto Search Control Unit. Precise random access capability allows the VO-7600 highly advanced interactive video applications.

33-pin Parallel Remote Control Interface

The VO-7600 is provided with a 33-pin remote control interface and can be connected to the RM-500 or RM-580 to allow basic functions of the VTR to be controlled remotely.



Audio Dubbing on CH-1

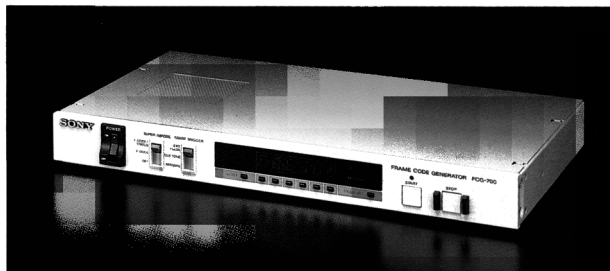
Additional audio, such as music or commentary, can be added to a videocassette which already has video signals on it by simply pressing the DUB/CH-1 and PLAY buttons simultaneously. Audio channel 1 is used for additional audio recording.

Real Time Counter

The real time counted by the CTL signal appears on the LED display. It provides an accurate indication of the tape running time (up to ± 99 minutes 59 seconds). When the BKU-701 Computer Interface Board is connected and the FRAME CODE/CTL switch is set to FRAME CODE, the Frame Code appears on the LED display.

Programmed Operation

When two points are designated by the MARK IN A and MARK IN B buttons and the programmed operation switch is set to , repeated playback between the two points is activated. The tape automatically stops at the point designated by the MARK IN A button when the switch is set to . When the optional BKU-701 Computer Interface Board is installed, the points can be set by both CTL and Frame Code and, therefore, two segments can be memorized.



FCG-700



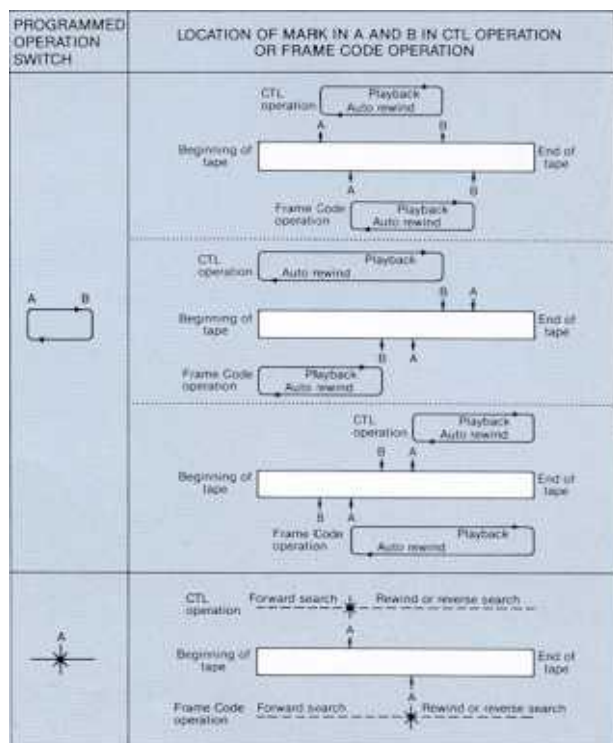
Frame Code Display



RX-707 and RS-232C Interface



Real Time Display



External Sync

The VO-7600 is capable of accepting an external sync through the VIDEO IN input for synchronization with other machines. This function allows smooth multiple VTR playback operation.

Timer Operation

With the aid of a commercially available AC on/off timer, the VO-7600 can be automatically started and stopped while unattended.

USER-FRIENDLY FUNCTIONS

Wireless/Wired Remote Control RM-770 (optional)

The optional RM-770 Simple Remote Control Unit allows wireless remote control of the VO-7600. When the infrared receiver, which is supplied with the RM-770, is connected to the remote connector of the VO-7600, functional controls such as playback, record, fast forward, rewind and 5 times normal speed search in the forward and reverse directions can be controlled remotely. The RM-770 is also supplied with a flexible five meter cable which allows wired remote control of the VO-7600 as well.

Picture Search

Recognizable color pictures at 5 times normal speed in both the forward and reverse directions can be obtained in the search mode. Therefore, it is very useful when trying to find desired pictures. When the optional RM-580 Remote Control Unit is connected, STILL, $1/30$, $1/10$, $1/5$, $1/2$, 1, 2, 5, and 8 times normal speed picture search in the forward and reverse directions is possible regardless of the cassette size.

Still Picture

In the pause mode clear still pictures appear with guard band noise limited to only the upper or lower portions of the screen. As a result, the still picture can be easily viewed.

DURABILITY AND RELIABILITY

Long Pause

When the tape is kept in the pause mode for more than 8 minutes, the VTR is automatically set into the "Long Pause" mode. In this mode, the tape is loosened around the head to prevent tape damage and to protect the video head.

Digital Hour Meter

The digital hour meter indicates on the LED counter the actual head usage time. The meter counts in 50 hour increments and it can indicate up to 9,950 hours.

Self-Diagnostics

The VO-7600 features a self-diagnostic function. This function improves serviceability by indicating various errors and defects.



RM-770



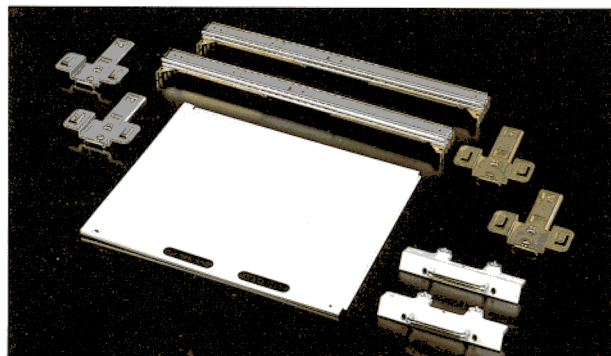
Digital Hour Meter

RF Modulator

Videocassette playback can be monitored on an ordinary TV receiver (American television standard VHF, CH3 or CH4) when the optional RFK-634 RF modulator is connected. This plug-in type unit can be easily installed in a compartment on the rear panel.

Four Unit Height/Rack Mountable

The VO-7600 is four units high and it can be installed in a 19 inch EIA standard rack with the optional RMM-507 Rack Mount Kit. These features are not only space-saving but also make maintenance more efficient.



RMM-507

Specifications

General

Video recording system:	Rotary 2-head helical scan system
Luminance:	FM recording
Chrominance:	SC-low-range conversion recording
Video signal system:	EIA monochrome, NTSC color
Operating temperature:	5°C ~ 40°C (41°F ~ 104°F)
Storage temperature:	-20°C ~ 60°C (-4°F ~ 140°F)
Power requirements:	AC 90 ~ 132V, 45 ~ 66Hz
Power consumption:	70W (with the RM-580 and RFK-634)
Dimensions:	424(W) × 192(H) × 492(D)mm (16.7 × 7.6 × 19.4")
Weight:	17 kg (37.5 lb)
Videocassette:	Sony KCA-BRS, KCA-XBR, KCS-BRS, KCS-XBR type or equivalent
Tape speed:	9.53 cm/sec.
Recording and playback time:	60 min. (with Sony KCA-60 U-matic videocassette)
Fast forward time:	Less than 4 min. (with Sony KCA-60 U-matic videocassette)
Rewind time:	Less than 4 min. (with Sony KCA-60 U-matic videocassette)
Search speed:	5 times normal speed both forward and reverse directions (STILL, $\pm 1/30$, $1/10$, $1/5$, $1/2$, 1, 2, 5, and 8 times with the RM-580)

Video

Input:	Video: 1.0V ± 0.1 Vp-p, 75 ohms, unbalanced, sync negative Ext. sync: 2.5V (2.0 ~ 5.0V)p-p, 75 ohms, unbalanced, sync negative
Output:	1.0V ± 0.2 Vp-p, 75 ohms, unbalanced, sync negative
Horizontal resolution:	250 lines (color/monochrome)
S/N ratio:	Better than 46dB (color) Better than 48dB (monochrome)

Audio

Input:	LINE: -10dBs, 47k ohms, unbalanced (0dBs=0.775Vrms) MIC: -60dBs, 3k ohms, unbalanced
Output:	Line: -5dBs (at 47k ohm load), unbalanced Monitor: -5dBs (at 47k ohm load), unbalanced
S/N ratio:	Better than 50dB (at 3% distortion)
Distortion:	Less than 2%
Frequency response:	50Hz ~ 15kHz
Wow and flutter:	Less than 0.18% rms

Supplied accessories:

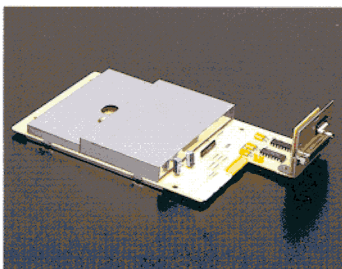
Operation manual
RF unit cover

Design and specifications subject to change without notice.

Optional accessories:



Frame Code Generator
FCG-700



Computer Interface Board
BKU-701



Auto Search Control Unit
RX-707



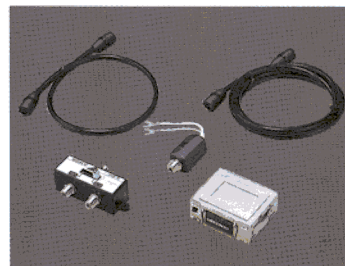
Auto Search Control Unit
RX-303/353



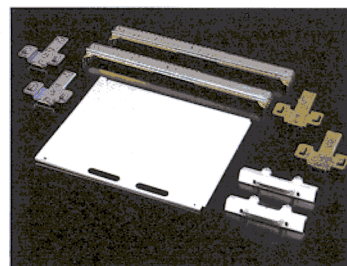
Remote Control Unit
RM-770



Remote Control Unit
RM-500/580



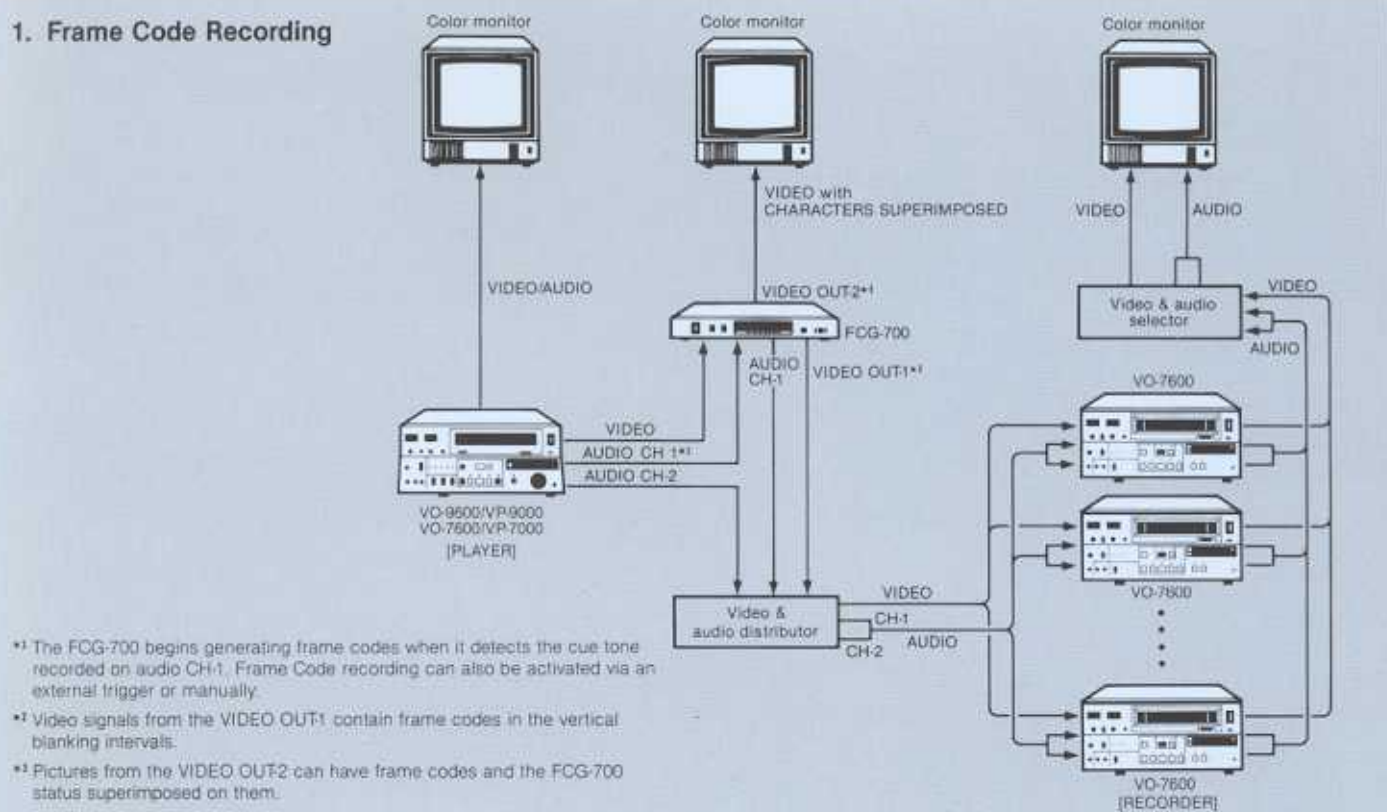
RF Kit
RFK-634



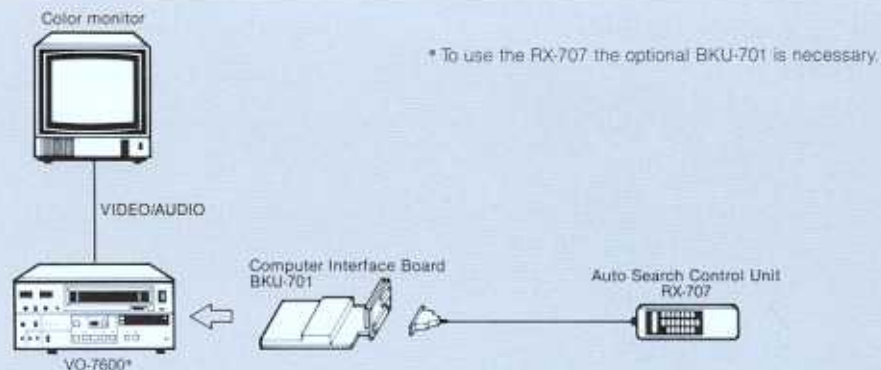
19" Rack Mount Kit
RMM-507

System Versatility

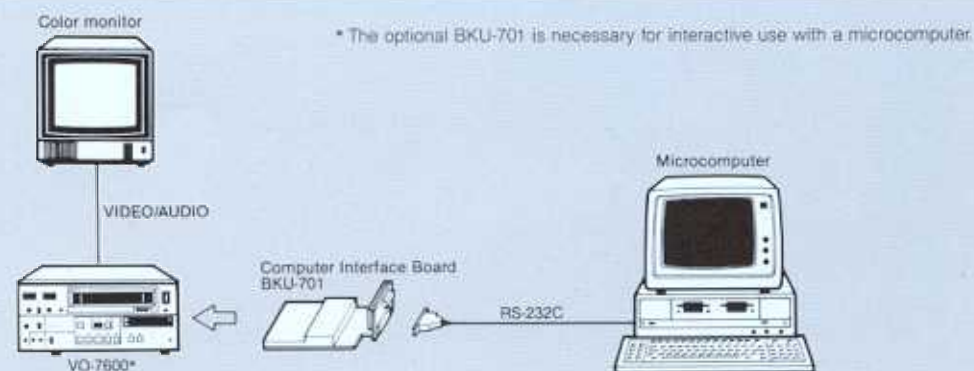
1. Frame Code Recording

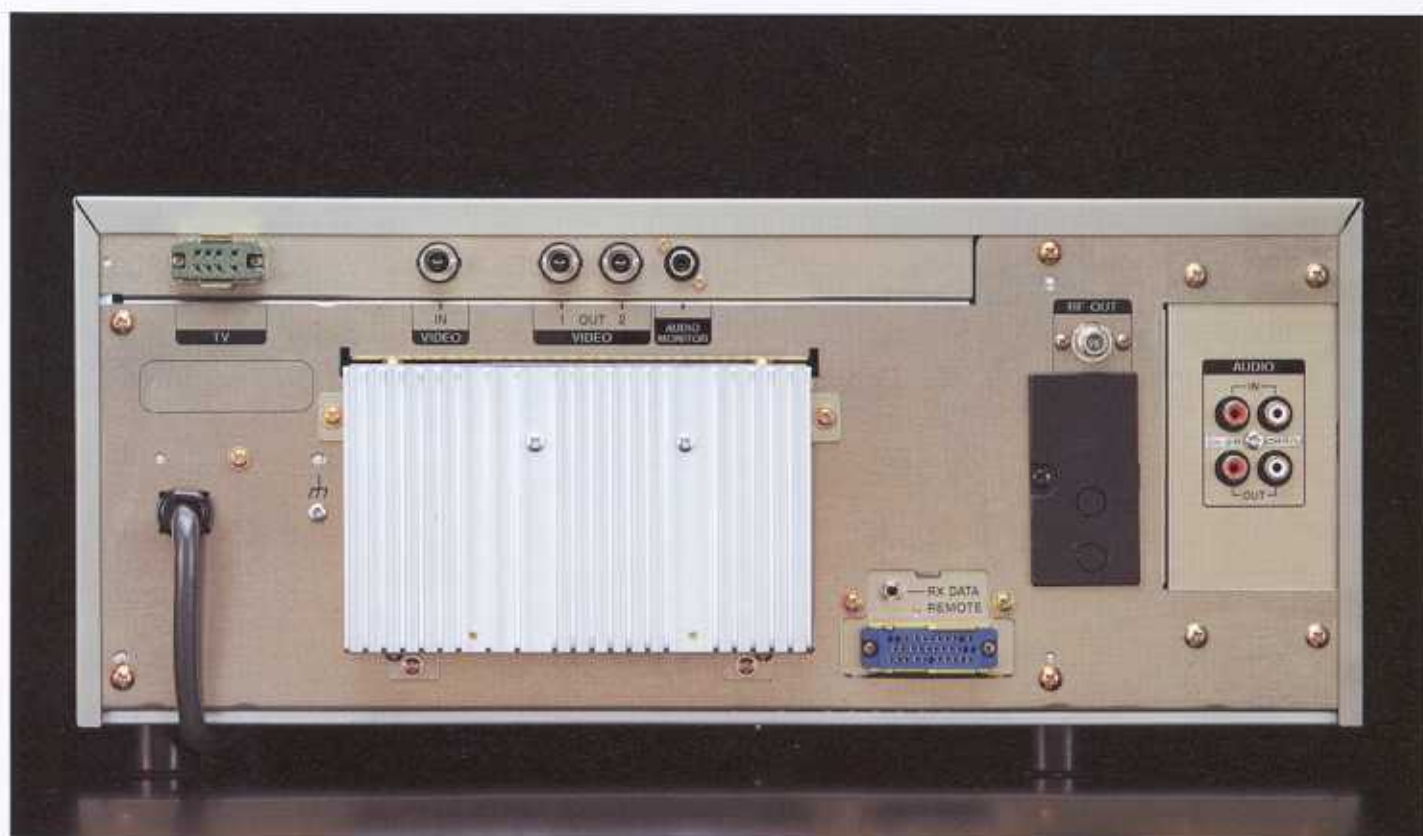


2. Random Access and Program Operation with Frame Code



3. Interactive Video with Frame Code





SONY®

Distributed by